

Serial No. 10/604,002

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GEMS 0197 PUS

REMARKS

Claims 1-21 are pending in the above application. Claims 1-21 were rejected under 35 USC 102 (a) as being anticipated by Joseph (US 6,456,076).

Claims 1-21 rejected under 35 USC 102 (a)

Claims 1-21 were rejected under 35 USC 102 (a) as being anticipated by Joseph (US 6,456,076). The Office Action asserts that the Joseph reference teaches all of the limitations of the present invention. The Applicant respectfully disagrees and requests reconsideration in light of the aforementioned amendments and the present arguments.

A novel inventive aspect of the present invention was its ability to handle multiple (more than two) shield windings sharing a similar plane. It was recognized in paragraph 32 of the specification that matched windings and winding length may not be feasible using multiple shield coils. Therefore, the present invention addresses a concern and failing not addressed by Joseph. By including independently controllable sub-circuits, the present invention can independently control currents through the shield coils (even though they are in parallel). This provides a much greater flexibility of coil selection that taught by Joseph. In addition, it paves the way for the claimed asymmetrical windings claimed by the present invention (see Claim 6 and Claim 9). This feature is not taught by Joseph and is particularly adapted to the present invention since variations in shield windings generated by the asymmetric format can be independently adjusted using the structure of the present invention. Thus the present invention contains limitations not taught, rendered obvious, or even considered by Joseph.

In addition, the present invention claims an additional (or third) shield coil in parallel with the others and in series with the gradient (see Claim 2). This should not be quickly dismissed as obvious. The increase in number of shield coils in parallel significantly impacts the variations generated in field by each shield when they are not exactly matched in windings and length. This concern is not addressed by Joseph. The present invention makes such expanded shielding scenarios possibly where previously impractical due to the independent control over each shielding set.

The Applicant respectfully requests reconsideration in light of the aforementioned amendments and remarks.

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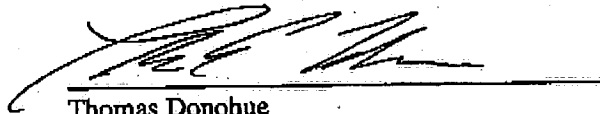
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CONCLUSION

The Applicant would like to thank the Examiner for his assistance. In light of the above amendments and remarks, Applicant submits that all objections and rejections are now overcome. Applicant has added no new material to the application by these amendments. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited.

Should the Examiner have any questions or comments that would place the application in better condition for allowance, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,



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